

### Abstract

The present invention provides reconstituted and recombinant tissue membranes and methods for pharmaceutical delivery of bioactive molecules. In particular, reconstituted and recombinant amniotic membranes are provided for sustained delivery of therapeutic  
5 molecules, proteins or metabolites, to a site of a host in need thereof. The reconstituted and recombinant amniotic membrane contains one or more recombinant expression vectors that are exogenous to the membrane and capable of expressing bioactive molecules. The reconstituted and recombinant tissue membranes and methods can be used for *in situ*  
10 delivery of therapeutic proteins to a host in the treatment of disorders such as chronic wounds and dermatologic or ocular surface diseases.